

# Divine Certainty: A Qur'anic and Philosophical Argument for God

- [Home](#)
- [Essays & Articles](#)
- Divine Certainty: A Qur'anic and Philosophical Argument for God

Hamza Andreas Tzortzis

72 minutes read.

Last updated on 31 January 2021.

---

**This essay provides a convincing qur'anic and philosophical argument for the existence of an uncreated creator who willed the universe to come into existence. The essay argues that this creator is uniquely one, eternal, transcendent, powerful and knowing. It also addresses popular and academic objections.**

\*The content of essay was originally published in the book, *The Divine Reality: God, Islam & The Mirage of Atheism* (2016, 2019).

---

Imagine you find yourself sitting in the corner of a room. The door that you entered through is now completely sealed and there is no way of entering or exiting. The walls, ceiling and floor are made up of stone. All you can do is stare into open, empty space, surrounded by cold, dark and stony walls. Due to immense boredom, you fall asleep. A few hours pass by; you wake up. As you open your eyes, you are shocked to see that in the middle of the room is a desk with a computer on top of it. You approach the desk and notice some words on the computer screen: *This desk and computer came from nothing.*

Do you believe what you have read on the screen? Of course you do not. At first glance you rely on your intuition that it is impossible for the computer and the desk to have appeared from no prior activity or cause. Then you start to think about what could possibly have happened. After some thought you realise a limited number of reasonable explanations. The first is that they could have come from no causal conditions or prior activity—in other words, nothing. The second is that they could have caused or created themselves. The third is that they could have been created or placed there by some prior cause. Since your cognitive faculties are normal and in working order, you conclude that the third explanation is the most rational.

Although this form of reasoning is universal, a more robust variation of the argument can be found eloquently summarised in the Qur'an. The argument states that the possible explanations for a finite entity coming into being could be that it came from nothing, it created itself, it could have been created by something else created, or it was created by something uncreated. Before I break down the argument further, it must be noted that the Qur'an often presents rational intellectual arguments. The Qur'an is a persuasive and powerful text that seeks to engage its reader. Hence it positively imposes itself on our minds and hearts, and the way it achieves this is by asking profound questions and presenting powerful arguments. Associate Professor of Islamic Studies Rosalind Ward Gwynne comments on this aspect of the Qur'an: "The very fact that so much of the Qur'an is in the form of arguments shows to what extent human beings are perceived as needing reasons for their actions...."<sup>1</sup>

Gwynne also maintains that this feature of the Qur'an influenced Islamic scholarship:

“Reasoning and argument are so integral to the content of the Qur’an and so inseparable from its structure that they in many ways shaped the very consciousness of Qur’anic scholars.”<sup>2</sup>

This relationship between reason and revelation was understood even by early Islamic scholars. They understood that rational thinking was one of the ways to prove the intellectual foundations of Islam. The 14th century Islamic scholar Ibn Taymiyya writes that early Islamic scholarship “knew that both revelational and rational proofs were true and that they entailed one another. Whoever gave rational... proofs the complete enquiry due them, knew that they agreed with what the messengers informed them about and that they proved to them the necessity of believing the messengers in what they informed them about.”<sup>3</sup>

### **The Qur’anic argument**

The Qur’an provides a powerful argument for God’s existence: “Or were they created by nothing? Or were they the creators [of themselves]? Or did they create the heavens and Earth? Rather, they are not certain.”<sup>4</sup>

Although this argument refers to the human being, it can also be applied to anything that began to exist, or anything that emerged. The Qur’an uses the word *khuliqu*, which means created, made or originated.<sup>5</sup> So it can refer to anything that came into being.

Now let us break down the argument. The Qur’an mentions four possibilities to explain how something was created or came into being or existence:

- Created by nothing: “or were they created by nothing?”
- Self-created: “or were they the creators of themselves?”
- Created by something created: “or did they create the heavens and the Earth?”, which implies a created thing being ultimately created by something else created.
- Created by something uncreated: “Rather, they are not certain”, implying that the denial of God is baseless, and therefore the statement implies that there is an uncreated creator.<sup>6</sup>

This argument can also be turned into a universal formula that does not require reference to scripture:

1. The universe is finite.
2. Finite things could have come from nothing, created themselves, been ultimately created by something created, or been created by something uncreated.
3. They could not have come from nothing, created themselves, or have been ultimately created by something created.
4. Therefore, they were created by something uncreated.

### **The universe is finite**

A range of philosophical arguments shows the finitude of the universe. The most cogent and simplest of these arguments involves demonstrating that an actual physical infinite cannot exist. The type of actual infinite that I am addressing here is a differentiated type of infinite, which is an infinite made up of discrete parts, like physical things or objects. These physical things can include atoms, quarks, buses, giraffes and quantum fields. The undifferentiated type of infinite, however, is an infinite that is not made of discrete parts. This infinite is coherent and can exist. For instance, the infinity of God is an undifferentiated infinite, as He is not made up of discrete physical parts. In Islamic theology, He is uniquely one and transcendent.

The most persuasive and intuitive arguments to substantiate the impossibility of an actual infinite, come in the form of thought experiments. Now the concern here is with the impossibility of the physical infinite being actualised. This is different from mathematical infinities. Although logically coherent, these exist in the mathematical realm, which is usually based on axioms and assumptions. Our concern is whether the infinite can be realised in the real physical world.

Take the following examples into consideration:

1. Bag of balls: Imagine you had an infinite number of balls in a bag. If you take two balls away, how many balls do you have left? Well, mathematically you still have an infinite number. However, practically, you should have two less than what is in the bag. What if you added another two balls instead of removing them? How many balls are there now? There should be two more than what was in the bag. You should be able to count how many balls are in the bag, but you cannot because the infinite is just an idea and does not exist in the real world. This clearly shows you cannot have an actualised infinite made up of discrete physical parts or things. In light of this fact, the famous German mathematician David Hilbert said, “The infinite is nowhere to be found in reality. It neither exists in nature nor provides a legitimate basis for rational thought... the role that remains for the infinite to play is solely that of an idea.”<sup>7</sup>
2. Stack of cubes with different sizes: Imagine you had a stack of cubes. Each cube is numbered. The first cube has a volume of 10cm<sup>3</sup>. The next cube on top of that has a volume of 5cm<sup>3</sup> and the next cube is half of the previous cube. This goes on *ad infinitum* (again and again in the same way forever). Now go to the top of the stack and remove the cube at the top. You cannot. There is no cube to be found. Why? Because if there was a cube to be found at the top it would mean that the cubes did not reach infinity. However, since there is no cube at the top, it also shows—even though the mathematical infinite exists (with assumptions and axioms)—that you cannot have an actualised infinite in the real world. Since there is no end to the stack, it shows the infinite—that is made up of discrete physical things (in this case the cubes)—cannot be physically realised.

Conceptually, the universe is no different to the bag of balls or the stack of cubes I have explained above. The universe is real. It is made up of discrete physical things. Since the differentiated infinite cannot exist in the real world, it follows that the universe cannot be infinite. This implies that the universe is finite, and since it is finite it must have had a beginning.

The scientific research that relates to the beginning of the universe has not been discussed here because the data is currently underdetermined. Underdetermination is a “thesis explaining that for any scientifically based theory there will always be at least one rival theory that is also supported by the evidence given...”<sup>8</sup> There are around 17 competing models to explain the cosmological evidence. Some of these models conclude that the universe is finite and had a beginning and others argue that the universe is past eternal. The evidence is not conclusive. The conclusions might change when new evidence is observed or new models are developed.

Now we are in a position to apply the four logical possibilities to explain the beginning of the universe and discuss each one.

### **Created from nothing?**

Before I address this possibility, I need to define what is meant by ‘nothing’. Nothing is defined as the absence of all things. To illustrate this better, imagine if everything, all matter, energy and potential, were to vanish; that state would be described as nothing. This is not to be confused with the quantum vacuum or field, a concept I will explain later. Nothing also refers to the absence of any causal condition. A causal condition is any type of cause that produces an effect. This cause can be material or non-material.

Asserting that things can come from nothing means that things can come into being from no potential, no matter or nothing at all. To assert such a thing defies our intuitions and stands against reason.

So, could the universe have come into existence from nothing? The obvious answer is no, because from nothing, nothing comes. Nothingness cannot produce anything. Something cannot arise from no causal conditions whatsoever. Another way of looking at it is by way of simple math. What is  $0 + 0 + 0$ ? It is not 3, it’s 0.

One of the reasons that this is so intuitive is because it is based on a rational (or metaphysical)

principle: being cannot come from nonbeing. To assert the opposite is what I would call counter discourse. Anyone could claim anything. If someone can claim that the entire universe can come from nothing, then the implications would be absurd. They could assert that anything could come into being without any causal conditions at all.

For something to arise from nothing it must have at least some type of potential or causal conditions. Since nothing is the absence of all things, including any type of causal condition, then something could not arise from nothing. Maintaining that something can arise from nothing is logically equivalent to the notion that things can vanish, decay, annihilate or disappear without any causal conditions whatsoever.

Individuals who argue that something can come from nothing must also maintain that something can vanish from no causal conditions at all. For example, if a building completely vanished, such individuals should not be surprised by the event, because if things can come from no causal conditions at all, then it logically implies that things can vanish by means of no causal conditions as well. However, to argue that things can just vanish without reference to any causal condition would be rationally absurd.

A common contention is that the universe could come from nothing because in the quantum vacuum particles pop into existence. This argument assumes that the quantum vacuum is nothing. However, this is not true. The quantum vacuum is *something*; it is not an absolute void and it obeys the laws of physics. The quantum vacuum is a state of fleeting energy. So it is not nothing, it is something physical.<sup>9</sup>

### **Professor Lawrence Krauss's 'nothing'**

Professor Lawrence Krauss's book, *A Universe from Nothing*, invigorated and popularised the debate on the Leibnizian question: "Why is there something rather than nothing?"<sup>10</sup> In his book, Krauss argues that it is plausible that the universe arose from 'nothing'. Absurd as this may sound, a few presuppositions and clarifications need to be brought to light to understand the context of his conclusions.

Krauss's 'nothing' is actually something. In his book, he calls nothing "unstable"<sup>11</sup>, and elsewhere he affirms that nothing is something physical, which he calls "empty but pre-existing space"<sup>12</sup>. This is an interesting linguistic deviation, as the definition of nothing in the English language refers to a universal negation, but it seems that Krauss's 'nothing' is a label for something. Although his research claims that 'nothing' is the absence of time, space and particles, he misleads the untrained reader and fails to confirm (explicitly) that there is still some physical stuff. Even if, as Krauss claims, there is no matter, there must be physical fields. This is because it is impossible to have a region where there are no fields because gravity cannot be blocked. In quantum theory, gravity at this level of reality does not require objects with mass, but does require physical stuff. Therefore, Krauss's 'nothing' is actually something. Elsewhere in his book, he writes that everything came into being from quantum fluctuations, which explains a creation from 'nothing', but that implies a pre-existent quantum state in order for that to be a possibility.<sup>13</sup>

Professor David Albert, the author of *Quantum Mechanics and Experience*, wrote a review of Krauss's book, and similarly concludes:

"But that's just not right. Relativistic-quantum-field-theoretical vacuum states — no less than giraffes or refrigerators or solar systems — are particular arrangements of simple physical stuff. The true relativistic-quantum-field-theoretical equivalent to there not being any physical stuff at all isn't this or that particular arrangement of the fields — it is just the absence of the fields! The fact that some arrangements of fields happen to correspond to the existence of particles and some do not is not any more mysterious than the fact that some of the possible arrangements of my fingers happen to correspond to the existence of a fist and some do not. And the fact that particles can pop in and out of existence, over time, as those fields rearrange themselves, is not any more mysterious than the fact that fists can pop in and out of existence, over time, as my fingers rearrange themselves.

And none of these poppings — if you look at them aright — amount to anything even remotely in the neighbourhood of a creation from nothing.”<sup>14</sup>

### *Philosophical distinctions*

Interestingly, Professor Krauss seems to have changed the definition of nothing in order to answer Leibniz’s perennial question. This makes the whole discussion problematic as Krauss’s definition blurs well-known philosophical distinctions. The term ‘nothing’ has always referred to non-being or the absence of something.<sup>15</sup> Therefore, the implications of Krauss’s ‘nothing’ is that it could be reasonable for someone to assert the following:

“I had a wonderful dinner last night, and it was nothing.”

“I met nobody in the hall and they showed me directions to this room.”

“Nothing is tasty with salt and pepper.”<sup>16</sup>

These statements are irrational statements and therefore amount to meaningless propositions, unless of course someone changes the definition of nothing. It is no wonder that Professor Krauss hints that his view of nothing does not refer to non-being. He writes: “One thing is certain, however. The metaphysical ‘rule,’ which is held as ironclad conviction by those with whom I have debated the issue of creation, namely that ‘out of nothing, nothing comes,’ has no foundation in science.”<sup>17</sup>

This clearly means Krauss has changed the meaning of nothing to mean something, because science as a method focuses on things in the physical world. Science can only answer in terms of natural phenomena and natural processes. When we ask questions like: *What is the meaning of life? Does the soul exist? What is nothing?* The general expectation is to have metaphysical answers—and hence, outside the scope of any scientific explanation.

Science cannot address the idea of nothing or non-being, because science is restricted to problems that observations can solve. Philosopher of science Elliot Sober verifies this limitation. He writes in his essay *Empiricism* that “science is forced to restrict its attention to problems that observations can solve.”<sup>18</sup> Therefore, Professor Krauss has changed the meaning of the word “nothing”, in order for science to solve a problem that it could not originally solve. Perhaps this outcome should be accepted as a defeat as it is tantamount to someone not being able to answer a question, and instead of admitting defeat or referring the question to someone else, resorting to changing the meaning of the question.

It would have been intellectually more honest to just say that the concept of nothing is a metaphysical concept, and science only deals with what can be observed.

### *Inconclusive research and popularising linguistic gymnastics*

Putting all of this aside, Professor Krauss admits that his ‘nothingness’ research is ambiguous and lacks conclusive evidence. He writes, “I stress the word *could* here, because we may never have enough empirical information to resolve this question unambiguously.”<sup>19</sup> Elsewhere in his book he admits the inconclusive nature of his argument: “Because of the observational and related theoretical difficulties associated with working out the details, I expect we may never achieve more than plausibility in this regard.”<sup>20</sup>

In light of this, Professor Krauss should have just said the universe came from something physical like a vacuum state, rather than redefining the word nothing. But Krauss seems to be adamant in popularising his linguistic gymnastics. During our debate: *Islam or Atheism: Which Makes More Sense?* I referred to his book to explain that his nothing is something, like some form of quantum haze. However, he reacted and said that his nothing is “No space, no time, no laws... there’s no universe, nothing, zero, zip, nada.”<sup>21</sup>

Krauss seemed to have deliberately omitted an important hidden premise: there is still some physical stuff in his nothing, something which he clearly admitted to in a public lecture. He said that something and nothing are “... physical quantities.”<sup>22</sup>

In summary, Professor Krauss's nothing is something. The universe came from something physical which Krauss calls "nothing", and therefore failing to answer Leibniz's question: *Why is there something rather than nothing?* In reality, Krauss only answers the question: *How did something come from something?* That is a question that science can answer, and which does not require linguistic acrobatics.

God's existence is not undermined by Krauss's view on nothing. All that he has really presented to us is that the universe (time and space) came from something. Therefore, the universe still requires an explanation for its existence.

**"Causality only makes sense within this universe; therefore, the universe may have come from nothing."**

Historical and academic discussions on the notion of causality include David Hume's objection that causality is a concept derived from our experiences. If Hume is right about causality, then we are not justified in postulating that the concept of causality exists or makes sense outside of our experiences. Since the argument in this essay refers to events outside of our experience—how the universe came into existence—causality cannot be used to explain these events. In other words, the universe could have come from nothing, because the notion of causality may only make sense within the universe and cannot be applied to anything outside of it. If we have no experience of the beginning of the universe or what happened prior to its existence, then we should simply stay silent on the matter.

This objection falsely assumes that causality is a concept based on experience. Causality is *a priori*; knowledge prior to experience. It is a metaphysical concept, that is required in order for us to understand our experiences in the first place. We bring it to all our experience, rather than our experience bringing it to us. It is like wearing yellow-tinted glasses, everything looks yellow not because of anything out there in the world, but because of the glasses through which we are looking at everything. Without causality, we would not be able to have a meaningful understanding of the world.

Take the following example into consideration; imagine you are looking at the White House in Washington DC. Your eyes may wonder to the door, across the pillars, then to the roof and finally over to the front lawn. You can also reverse the order of your perceptions; you can first start to look at the lawn, then to the roof, the pillars and finally the roof. Now contrast this to another experience, you are on the river Thames in London and you see a boat floating past. You can only see the front of the boat before you see the back, and you cannot reverse the order of that experience as the boat floats past. When you looked at the White House you had a choice to see the door first and then the pillars and so on. You could also reverse the order of your perceptions. However, with the boat you had no choice. The front of the boat was the first to appear, and you could not reorder your perceptions by trying to see the back before you saw the front. What dictates the order in which you had these experiences? Why is it that you know when you can order your perceptions and when you cannot? The answer is the concept of causality. There are logical causal connections occurring in your mind while you are perceiving the White House and the boat.

The point to take here is that you would not have been able to make the distinction that some experiences are ordered by yourself and others are ordered independently, unless you had the concept of causality. In absence of causality, our experiences would be very different from the way that they are. They would be a single sequence of experiences only: one thing after another. Causality is independent of experience because we would not be able to experience anything without it. Therefore, it logically follows that causality exists prior to our experience of the universe.

**If you cannot have something from nothing, then how did God create from nothing?**

This contention is false, as it implies that God is nothing. God is a unique agent with the potential to create and bring things into existence through His will and power. Therefore, it is not the case of

something coming from nothing. God's will and power were the causal conditions to bring the universe into existence.

Something coming from nothing is impossible, because nothing implies non-being, no potential and no causal conditions. It is irrational to assert that something can emerge from an absolute void without any potential or prior causal activity. God provides that causal activity via His will and power. Even though the Islamic intellectual tradition refers to God creating from nothing, this act of creation means that there was no material stuff. However, it does not assume that there were no causal conditions or potential.<sup>23</sup> God's will and power form the causal conditions to bring the universe into existence.

### **Self-created?**

Could the universe have created itself? The term 'created' refers to something that emerged, and therefore it was once not in existence. Another way of speaking about something being created is that it was brought into being. All of these words imply something being finite, as all things that were created are finite. Understanding the concept of creation leads us to conclude that self-creation is a logical and practical impossibility. This is due to the fact that self-creation implies that something was in existence and not in existence at the same time, which is impossible. Something that emerged means that it once was not in existence; however, to say that it created itself implies that it was in existence before it existed!

Consider the following question: *Was it possible for your mother to give birth to herself?* To claim such a thing would suggest that she would have to be born before she was born. When something is created, it means it once did not exist, and therefore had no power to do anything. So to claim that it created itself is impossible, as it could not have any power before it was created in order to create itself. This applies to all finite things, and that includes the universe too. Islamic scholar Al-Khattabi aptly summarises the fallacy of this argument: "This is [an] even more fallacious argument, because if something does not exist, how can it be described as having power, and how could it create anything? How could it do anything? If these two arguments are refuted, then it is established that they have a creator, so let them believe in Him."<sup>24</sup>

Andrew Compson, the current chair of the British Humanist Association, once engaged in a public debate with me at the University of Birmingham. I presented the Qur'anic argument for God's existence. His response to my assertion that self-creation is impossible was that self-creation can be found in single-celled organisms, also known in biology as asexual reproduction.

Andrew's objection is false on a few grounds. Firstly, what he referred to in single-celled organisms is not self-creation, but rather a mode of reproduction by which offspring arise from a single organism and inherit the genetic material of that parent only. Secondly, if we logically extend his example to the universe, it assumes that the universe always existed, because for asexual reproduction to occur you need a parent that existed prior to the offspring. Therefore, his objection actually proves the point I was making; the universe once never existed, so it could not bring itself into existence.

You may be thinking that this objection is absurd, and it was not necessary to discuss it. I agree. However, I included this to show how unreasonable some atheist counter-arguments can be.

### **Created by something else that was created?**

For argument sake, let's answer "yes" to the following question: *Was the universe created by something else created?* Will that satisfy the questioner? Obviously not. The contentious person will undoubtedly ask, "Then, what created that thing?" If we were to answer, "Another created thing", what do you think he would say? Yes, you guessed right: "What created that thing?" If this ridiculous dialogue continued forever, then it would prove one thing: the need for an uncreated creator.

Why? Because we cannot have the case of a created thing, like the universe, being created by

another created thing in an unlimited series going back forever (known as an infinite regress of causes). It simply does not make sense. Consider the following examples:

- Imagine that a sniper, who has acquired his designated target, radios through to HQ to get permission to shoot. HQ, however, tells the sniper to hold on while they seek permission from someone higher-up. Subsequently, the person higher-up seeks permission from the guy even higher up, and so on and so on. If this keeps going on forever, will the sniper ever get to shoot the target? Of course not! He will keep on waiting while someone else is waiting for a person higher up to give the order. There has to be a place or person from where the command is issued; a place where there is no one higher. Thus, our example illustrates the rational flaw in the idea of an infinite regress of causes. When we apply this to the universe we have to posit that it must have had an uncreated creator. The universe, which is a created thing, could not be created by another created thing, *ad infinitum*. If that were the case this universe would not exist. Since it exists, we can dismiss the idea of an infinite regress of causes as an irrational proposition.<sup>25</sup>
- Imagine if a stock trader at the stock exchange was not able to buy or sell his stocks or bonds before asking permission from the investor. Once the stock trader asked his investor, he also had to check with his investor. Imagine if this went on forever. Would the stock trader ever buy or sell his stocks or bonds? The answer is no. There must be an investor who gives the permission without requiring any permission himself. In similar light, if we apply this to the universe, we would have to posit a creator for the universe that is uncreated.

Once the above examples are applied to the universe directly, it will highlight the absurdity of the idea that the universe ultimately was created by something created. Consider if this universe, U1, was created by a prior cause, U2, and U2 was created by another cause, U3, and this went on forever. We wouldn't have universe U1 in the first place. Think about it this way, when does U1 come into being? Only after U2 has come into being. When does U2 come into being? Only after U3 has come into being. This same problem will continue even if we go on forever. If the ability of U1 to come into being was dependent on a forever chain of created universes, U1 would never exist.<sup>26</sup> As Islamic philosopher and scholar Dr. Jaafar Idris writes: "There would be no series of actual causes, but only a series of non-existents... The fact, however, is that there are existents around us; therefore, their ultimate cause must be something other than temporal causes."<sup>27</sup>

### **Created by something uncreated?**

So, what is the alternative? The alternative is a first cause. In other words, an uncaused cause or an uncreated creator. The 11th century theologian and philosopher Al-Ghazali summarised the existence of an uncaused cause or an uncreated creator in the following way: "The same can be said of the cause of the cause. Now this can either go on *ad infinitum*, which is absurd, or it will come to an end."<sup>28</sup>

What the above discussion is essentially saying is that something must have always existed. Now there are two obvious choices: God or the universe. Since the universe began and is dependent, it cannot have always existed. Therefore, something that always existed must be God. In the appendix to Professor Anthony Flew's book *There is a God*, the philosopher Abraham Varghese explains this conclusion in a simple yet forceful way. He writes: "Now, clearly, theists and atheists can agree on one thing: if anything at all exists, there must be something preceding it that always existed. How did this eternally existing reality come to be? The answer is that it never came to be. It always existed. Take your pick: God or universe. Something always existed."<sup>29</sup>

Thus, we can conclude that there exists an uncreated creator for everything that is created. The power of this argument is captured in the reaction of the companion of the Prophet Muhammad ﷺ Jubayr ibn Mut'im. When he heard the relevant verses of the Qur'an addressing this argument he said, "my heart almost began to soar."<sup>30</sup> The scholar Al-Khattabi said that the reason Jubayr was so moved by these verses was because of "the strong evidence contained therein touched his sensitive



nature, and with his intelligence understood it.”<sup>31</sup>

What has been established so far is that there must be an uncreated creator. This does not imply the traditional concept of God. However, if we think carefully about the uncreated creator, we can form conclusions that lead to the traditional understanding of God.

### **Eternal**

Since this creator is uncreated, it means that it was always in existence. Something that did not begin has always existed, and something that has always existed is eternal. The Qur'an makes this very clear: “God, the Eternal Refuge. He neither begets nor is born.”<sup>32</sup>

*Who created God?*

A typical response to the eternality of the Divine is the outdated atheist cliché: *Who created God?* This childish contention is a gross misrepresentation and misunderstanding of the argument I have been elucidating in this essay. There are two main responses to this objection.

Firstly, the third possibility that we discussed concerning how the universe came into being was: *Could it be created by something created?* We discussed that this was ultimately not possible because of the absurdity of the infinite regress of causes. The conclusion was simple: there must have been an uncreated creator. Being uncreated means God was not created. I have already presented a few examples to highlight this fact.

Secondly, once we have concluded that the best explanation for the emergence of the universe is the concept of God, it would be illogical to maintain that someone created Him. God created the universe and is not bound by its laws; He is, by definition, an uncreated Being, and He never came into existence. Something that never began cannot be created. Professor John Lennox explains these points in the following way:

“I can hear an Irish friend saying: ‘Well, it proves one thing- if they had a better argument, they would use it.’ If that is thought to be a rather strong reaction, just think of the question: Who made God? The very asking of it shows that the questioner has created God in mind. It is then scarcely surprising that one calls one’s book *The God Delusion*. For that is precisely what a created god is, a delusion, virtually by definition—as Xenophanes pointed out centuries before Dawkins. A more informative title might have been: *The Created-God Delusion*. The book could then have been reduced to a pamphlet—but sales might just have suffered... For the God who created and upholds the universe was not created—He is eternal. He was not ‘made’ and therefore subject to the laws that science discovered; it was he who made the universe with its laws. Indeed, the fact constitutes the fundamental distinction between God and the universe. The universe came to be, God did not.”<sup>33</sup>

### **Transcendent**

This uncreated creator cannot be part of creation. A useful example to illustrate this is when a carpenter makes a chair. In the process of designing and creating the chair, he does not become the chair. He is distinct from the chair. This applies to the uncreated creator as well. He created the universe and therefore is distinct from what He created. The theologian and scholar Ibn Taymiyya argued that the term, “created”, implied that something was distinct from God.<sup>34</sup>

If the creator was part of creation, it would make Him contingent or dependent with limited physical qualities. This, in turn, would mean that He would require an explanation for His existence, which would imply He cannot be God.

The Qur'an affirms the transcendence of God. It says, “There is nothing like unto Him.”<sup>35</sup>

### **Knowing**

This uncreated creator must have knowledge because the universe that He created has established laws. These include the law of gravity, the weak and strong nuclear force, and the electromagnetic

force. These laws imply there is a lawgiver, and a lawgiver implies knowledge. The Qur'an says, "Indeed God is, of all things, Knowing."36

## **Powerful**

This uncreated creator must be powerful because He created the universe, and the universe has immense energy, both usable and potential. Take, for instance, the number of atoms in the observable universe, which is around 1080.37 If you were to take just one of these atoms and split it, it would release an immense amount of energy—known as nuclear fission. A created thing with usable and potential energy could not have acquired that from itself. Ultimately, it came from the Creator, who in turn must be powerful.

If the creator did not have power, it would mean that He is unable, incapable and weak. Since the universe was created, it is a simple proof that He must have ability and power. Now just imagine the immense power of the Creator by reflecting on the universe and all that it contains. The Qur'an asserts the power of God:

"God creates what He wills for verily God has power over all things."38

### *The omnipotence paradox*

The Islamic position regarding God's ability is summed up in the following creedal statement found in *The Creed of Imam Al-Tahawi*. It states, "He is Omnipotent. Everything is dependent on Him, and every affair is effortless for Him."39

However, a common objection to God's power is the omnipotence paradox. This concerns the ability of an All-Powerful Being to limit its power. The question that is raised is: *If God is omnipotent, can He create a stone He cannot move?*

To answer this question, the meaning of 'omnipotence' needs to be clarified. What it implies is the ability to realise every possible affair. Omnipotence also includes the impossibility of failure. The questioner, however, is saying that since God is All-Powerful, He is capable of anything, including failure. This is irrational and absurd, as it is equivalent to saying "an All-Powerful Being cannot be an All-Powerful Being". Failure to achieve or do something is not a feature of omnipotence. From this perspective, the ability of God to "create a stone He cannot move" actually describes an event that is impossible and meaningless.

The question does not describe a possible affair, just as if we were to say "a white black crow" or "a circle triangle". Such statements describe nothing at all; they have no informative value and are meaningless. So why should we even answer a question that has no meaning? To put it bluntly, the question is not even a question.

In his discussion of the Qur'anic verse, "God has power over all things",40 classical scholar Al-Qurtubi explains that God's power refers to every possible state of affairs: "This [verse] is general... it means that it is permitted to describe God with the attribute of power. The community agree that God has the name The-Powerful... God has power over every possibility whether it is brought into existence or remains non-existent."41

To conclude, God can create a stone that is heavier than anything we can imagine, but He will always be able to move the stone because failure is not a feature of omnipotence.42

## **Will**

This uncreated creator must have a will for a number of reasons.

Firstly, since this creator is eternal and brought into existence a finite universe, it must have chosen the universe to come into existence. This creator must have chosen the universe to come into existence when the universe was non-existent and could have remained so. Something that has a choice obviously has a will.

Secondly, the universe contains beings that have a conscious will and volition. Therefore, the one

who created the universe with living beings that have a will must also have a will. One cannot give something to a thing that one does not contain or have the ability to give rise to it. Therefore, the Creator has a will.

Thirdly, there are two types of explanations we can apply to the creation of the universe. The first is a scientific explanation, and the second is a personal one. Let me explain this using tea. In order to make tea, I have to boil some water, place the tea bag in the cup and allow it to infuse. This process can be explained scientifically. The water must be 100 degrees Celsius (212 degrees Fahrenheit) before it reaches boiling point, it has to travel across a semipermeable membrane (tea bag), and I have to use my glycogen stores to enable my muscles to contract to move my limbs to ensure all of this takes place. Obviously, a trained scientist could go into further detail, but I think you get the point. Conversely, the whole process can also be explained personally: the tea has been made because I wanted some tea. Now let's apply this to the universe. We do not have observations or empirical evidence on how the Creator created the universe; we can only rely on a personal explanation, which is that God chose for the universe to come into existence. Even if we had a scientific explanation, it would not negate a personal one, as shown in the tea example.<sup>43</sup>

The Qur'an affirms the fact that God has a will: "Your Lord carries out whatever He wills."<sup>44</sup>

Islamic scholar Al-Ghazali presents an eloquent summary of the implications of God having a will. He asserts that everything that happens is due to God's will and nothing can escape it:

"We attest that He is the Willer of all things that are, the ruler of all originated phenomena; there does not come into the visible or invisible world anything meagre or plenteous, small or great, good or evil, or any advantage or disadvantage, belief or unbelief, knowledge or ignorance, success or failure, increase or decrease, obedience or disobedience, except by His will. What He wills is, and what He does not, will not; there is not a glance of the eye, nor a stray thought of the heart that is not subject to His will. He is the Creator, the Restorer, the Doer of whatsoever He wills. There is none that rescinds His command, none that supplements His decrees, none that dissuades a servant from disobeying Him, except by His help and mercy, and none has power to obey Him except by His will."<sup>45</sup>

## One

There are various reasons why the creator must be one. These include:

- The argument from exclusion;
- Conceptual differentiation;
- Occam's razor;
- The argument from definition.

### *Argument from exclusion*

This argument maintains that the existence of multiple creators is impossible because there can only be one will. Since the Creator is eternal and brought into existence the universe which began at a point in time, it means that the Creator chose the universe to come into existence; choice implies a will. Questioning how many wills can exist leads us nicely to discuss this argument in detail.

For the sake of argument, let's say there were two creators. Creator A wanted to move a rock, and creator B also wanted to move the same rock. There are three possible scenarios that can arise:

1. One of the creators overpowers the other by moving the rock in a different direction from the other.
2. They both cancel each other out, and the rock does not move.
3. They both move the rock in the same direction.

The first scenario implies only one will manifests itself. The second scenario means that there is no will in action. This is not possible because there must be a will acted upon, as we have creation in existence. The third scenario ultimately describes only one will. Therefore, it is more rational to

conclude that there is only one creator because there is only one will.

If someone argues that you can have more than one entity and still have one will, I would respond by asking: *how do you know there is more than one entity?* It sounds like an argument from ignorance, because there is no evidence whatsoever for such a claim. This leads us to the next argument.

### *Conceptual differentiation*

For two creators to exist, they must be different in some way. For example, if you have two trees, they will differ in size, shape, colour and age. Even if they had identical physical attributes, there would be at least one thing that allows us to distinguish that they are in fact two trees. This can include their placement or position. You can also apply this to twins; we know there are two people because something makes them different. This could even be the mere fact that they cannot occupy the same place at the same time.

If there were more than one creator, then there must be something to differentiate between them. However, if they are the same in every possible aspect, then how can we say there are two? If something is identical to another, then what is true of one is also true for the other. Say we had two things, A and B. If they are the same in every way, and nothing allows us to differentiate between them, then they are the same thing. We can turn this into a hypothetical proposition: If whatever is true of A is true of B, then A is identical to B.

Now let us apply this to the Creator. Imagine that two creators exist, called creator X and creator Y, and that whatever is true of creator X is also true of creator Y. For instance, creator X is All-Powerful and All-Wise; so, creator Y is All-Powerful and All-Wise. How many creators are there in reality? Only one, due to the fact that there is nothing to differentiate between them. If someone were to argue that they are different, then they would not be describing another creator but something that is created, as it would not have the same attributes befitting the Creator.

If someone is adamant in claiming that there can be two creators and they are different from each other, then I simply ask, "How are they different?" If they attempt to answer the question, they enter the realm of arguing from ignorance, because they will have to make up evidence to justify their false conclusion.

### *Occam's razor*

In light of the above, we might find a few irrational and stubborn people who still posit a plurality of creators or causes. In light of Occam's razor, this is not a sound argument. Occam's razor is a philosophical principle attributed to the 14th century logician and Franciscan friar William of Occam. This principle enjoins: 'Pluralitas non est ponenda sine necessitate'; in English 'Plurality should not be posited without necessity.' In other words, the simplest and most comprehensive explanation is the best one.

In this case, we have no evidence that the Creator of the universe is actually a combination of two, three or even one thousand creators, so the simplest explanation is that the Creator is one. Postulating a plurality of creators does not add to the comprehensiveness of the argument either. In other words, to add more creators would not enhance the argument's explanatory power or scope. To claim that an All-Powerful creator created the universe is just as comprehensive as claiming that two All-Powerful creators created it. One creator is all that is required, simply because it is All-Powerful. I would argue that postulating multiple creators actually has reduced explanatory power and scope; this is because it raises far more problems than it solves. For example, the following questions expose the irrationality of this form of polytheism; how do many external beings co-exist? What about the potential of any conflicting wills? How do they interact?

A popular objection to this argument is that if we were to apply this principle to the pyramids in Egypt, we would absurdly adopt the view that they were made by one person, because it seems to be the simplest explanation. This is a misapplication of the principle, because it ignores the point

about comprehensiveness. Taking the view that the pyramids were built by one person is not the simplest and most comprehensive explanation, as it raises far more questions than it answers. For instance, how could one man have built the pyramids? It is far more comprehensive to postulate that it was built by many men. In light of this, someone can say that the universe is so complex that it would be absurd to postulate that only one creator created it. This contention, although valid, is misplaced. A powerful Being creating the whole universe is a far more coherent and simple explanation than a plurality of creators, because a plurality of creators raises the unanswerable questions stated in the previous paragraph. Nevertheless, the critic may continue to argue that it wasn't one person that created the Pyramids, but an All-Powerful creator. The problem with this is that nothing within the universe is an All-Powerful Being, and since the Pyramids are buildings, and buildings are built by an efficient cause (a person or persons that act), then the Pyramids must have been created by the same type of cause. This leads us back to the original point, that more than one of these causes was required to build the Pyramids.

### *The argument from definition*

Reason necessitates that if there were more than one creator, the universe would be in chaos. There would also not be the level of order we find in the cosmos. The Qur'an has a similar argument: "Had there been within the heavens and Earth gods besides God, they both would have been ruined."<sup>46</sup>

The classical commentary known as *Tafsir al-Jalalayn* states: "Heaven and the Earth would have lost their normal orderedness since there would have inevitably been internal discord, as is normal when there are several rulers: they oppose one another in things and do not agree with one another."<sup>47</sup>

However, one might point out that since more than one person made your car—one person fitted the wheels, and someone else installed the engine and another person installed the computer system—maybe the universe was created in the same way. This example indicates that a complex object can be created by more than one creator.

In order to respond to this contention, what has to be understood is that the most rational explanation for the origins of the universe is the concept of God and not just a 'creator'. There may be an abstract conceptual possibility of multiple creators, as highlighted by the car example, but there cannot be more than one God. This is because God by definition is the Being that has an imposing will that cannot be limited by anything external to Him. If there were two or more Gods, they would have a competition of wills, which would result in chaos and disorder. The universe we observe is governed by mathematical laws and order; therefore it makes sense that it is the result of one imposing will. Interestingly, the objection above actually supports Divine oneness. In order for the car to work, the different people who were responsible for making it had to conform to the overall 'will' of the designer. The design limited the wills of those responsible for making the car. Since God, by definition, cannot have His will limited by anything outside of Himself, it follows that there cannot be more than one Divine will.

However, one may argue that multiple Gods can agree to have the same will or they can each have their own domain. This would mean that their wills are now limited and passive, which would mean they are not Gods any more by definition.

The 12th century Muslim thinker and philosopher Ibn Rushd, also known as Averroes in the western tradition, summarises this argument:

"The meaning of the... verse is implanted in the instincts [of man] by nature. It is self-evident that if there are two kings, the actions of each one being the same as those of the other, it would not be possible [for them] to manage the same city, for there cannot result from two agents of the same kind one and the same action. It follows necessarily that if they acted together, the city would be ruined, unless one of them acted while the other remained inactive; and this is incompatible with the attribute of Divinity. When two actions of the same kind converge on one substratum, that

substratum is corrupted necessarily.”<sup>48</sup>

These are some of the arguments that can be used to show that God is one; however this topic—once truly understood—will have some profound effects on the human conscience. If one God has created us, it follows that we must see everything via His oneness and not our abstracted perspectives of disunity and division. We are a human family, and if we see ourselves this way, it can have profound effects on our society. If we love and believe in God, then we should show compassion and mercy to what He has created. Just like what the Prophet Muhammad ﷺ said:

“Those who are merciful will be shown mercy by the Most Merciful. Be merciful to those on the Earth and the One in the heavens will have mercy upon you.”<sup>49</sup>

### **A Note on Causality, Time and The Big Bang**

Some objectors argue that causality only makes sense with time. They maintain that since time began at the Big Bang, we cannot claim something caused the universe because there was no ‘before’ at the beginning of the Big Bang. In absence of time, there is “no cause or effect, because cause comes *before* effect.”<sup>50</sup>

There are a few problems with this objection.<sup>51</sup>

- The view that causality can only make sense with time requires proof. In philosophy there is no consensus on the definition and nature of causality. There are various approaches that attempt to define and understand causality and causal relations. One such approach is simultaneous causality. This is the view “that causes always occur simultaneously with their immediate effects.”<sup>52</sup> One could argue that the universe and its cause occurred at the same time. The following thought experiment explains such causal relation. Imagine an eternal ball on an eternal pillow. The ball causes the indentation of the pillow, but the cause (ball) does not come before the effect (indentation in the pillow); as time not a factor due to the eternality of the objects.<sup>53</sup> In the context of this argument, it could be that the moment God brought the universe into existence *was* the moment the universe came into being. This type of causation is atemporal. This means that the cause (in this case, God’s will and power) occurred prior causally but not prior temporally (in time). The cause and affect occurred simultaneously.
- It assumes there is a consensus on the notion of time in science. There are different notions of time in quantum mechanics and general relativity. To assume that there is one conception of time misrepresents the literature.<sup>54</sup>
- This objection is self-defeating. If causality cannot exist without time then the Big Bang should be rejected. Given that at the point of the Big Bang’s singularity there was no time, but a boundary to time, and the boundary is obviously causally connected to the rest of the universe, then how can this causal relation makes sense with no time? If the objectors accept that the boundary is causally connected to the rest of the universe, they should also accept the same atemporal causal relation when God decided to manifest His will and power to create the universe.<sup>55</sup> If they maintain that causality doesn’t make sense outside of time, they will have to reject the causal relation between the boundary of the singularity to the rest of the universe, which is tantamount to rejecting the existence of the universe. The objector can argue that some physicists maintain that the universe has no boundary. This however is a contentious issue with no consensus.<sup>56</sup>

Given that there isn’t a consensus on the nature of causality and the concept of time is contested, the objection above is not an undercutting defeater to the argument presented in this essay.

Although there are other objections to the argument presented in this essay, they do not qualify as defeaters. This means that even if these objections could not be responded to, the argument would still maintain its rational force. Nevertheless, there are some questions that challenge this argument, including: *If the Creator of the universe is eternal, why did the universe begin to exist when it did, instead of existing from eternity? If God is maximally perfect and transcendent, what caused Him to*

*create at all? Does God require creation in order to possess attributes of perfection? These questions have been intelligently addressed in a paper entitled The Kalam Cosmological Argument and the Problem of Divine Creative Agency and Purpose.*<sup>57</sup>

In this essay, we have seen that the Qur'an provides an intuitive and powerful argument for God's existence. Since the universe is finite, it had a beginning. If it began, then it can be explained as coming from nothing, creating itself, being ultimately created by something created or being created by something uncreated. The rational answer is that the universe was brought into being by an uncreated creator who is transcendent, knowing, powerful, has a will and is one.

## References

1 Gwynne, R. W. (2004) *Logic, Rhetoric and Legal Reasoning in the Qur'an: God's Arguments*. Abingdon: Routledge. 2004, p. ix.

2 Ibid, p. 203

3 Cited in Hoover, J. (2007). *Ibn Taymiyya's Theodicy of Perpetual Optimism*. Leiden: Brill, p. 31.

4 The Qur'an, Chapter 52, Verses 35 and 36.

5 Mohar, M. A. (2003). *A word for word meaning of the Qur'ān*. Vol III. Ipswich: JIMAS, p. 1713.

6 This argument has been inspired by and adapted from Idris, J. (1994) *The Contemporary Physicists and God's Existence*. Available at: <http://www.jaafaridris.com/the-contemporary-physicists-and-gods-existence/> [Accessed 23rd November 2016].

7 Hilbert, D. (1964). On the Infinite. In: P. Benacerraf and H. Putnam (eds), *Philosophy of Mathematics: Selected Readings*. Englewood Cliffs, NJ: Prentice-Hall, p. 151.

8 Quine: Terms explained. Available at:

<http://www.rit.edu/cla/philosophy/quine/underdetermination.html> [Accessed 23rd October 2016].

9 American Physical Society. (1998). *Focus: The Force of Empty Space*. Available at: <http://physics.aps.org/story/v2/st28> [Accessed 23rd November 2016].

10 Leibniz, G. W. (1714). *The Principles of Nature and Grace, Based on Reason*. 1714. Available at: <http://www.earlymoderntexts.com/assets/pdfs/leibniz1714a.pdf> [Accessed 4th October 2016].

11 Krauss, L. M. (2012). *A Universe from Nothing: Why is there Something Rather Than Nothing*. London: Simon & Schuster, p. 170.

12 Ibid.

13 Ibid, p. 105.

14 Albert, D. (2012). 'A Universe From Nothing,' by Lawrence M. Krauss. Available at: [http://www.nytimes.com/2012/03/25/books/review/a-universe-from-nothing-by-lawrence-m-krauss.html?\\_r=0](http://www.nytimes.com/2012/03/25/books/review/a-universe-from-nothing-by-lawrence-m-krauss.html?_r=0) [Accessed 1st October 2016].

15 Craig, W.L. (2012). *A Universe from Nothing*. Available at: <http://www.reasonablefaith.org/a-universe-from-nothing> [Accessed 9th October 2016].

16 Analogies adapted from Craig, W.L. (2012). *A Universe from Nothing*. Available at: <http://www.reasonablefaith.org/a-universe-from-nothing> [Accessed 9th October 2016].

17 Krauss, L. A (2012). *Universe from Nothing*, p. 174.

18 Sober, E. (2010). Empiricism. In: Psillos, S and Curd, M, ed, *The Routledge Companion to Philosophy of Science*. Abingdon: Routledge, pp. 137-138.

19 Krauss, L. (2012) *A Universe from Nothing*, p. xiii.

20 Ibid p. 147.

- 21 iERA. (2013). *Lawrence Krauss vs Hamza Tzortzis – Islam vs. Atheism Debate*. Available at: <http://www.youtube.com/watch?v=uSwJuOPG4FI> [Accessed 10th September 2016].
- 22 Tony Sobrado. (2012). *How the Universe Came from ‘Nothing’*, Richard Dawkins and Lawrence Krauss discuss. Available at: <https://youtu.be/CXGyesfHzew?t=921> [Accessed 2nd October 2016].
- 23 Wali-Allah, S. (2003). *The Conclusive Argument from God (Hujjat Allah al-Baligha)*. Translated by Marcia K. Hermansen. Islamabad: Islamic Research Institute, p. 33.
- 24 Cited in Al-Bayhaqi, A. (2006). *Kitab al-Asma was-Sifat*. Edited by Abdullah Al-Hashidi. Cairo: Maktabatu al-Suwaadi. Vol 2, p. 271.
- 25 This example has been taken from Green, A. R. *The Man in the Red Underpants*. 2nd Edition. London: One Reason, pp. 9-10.
- 26 This example has been adapted from Idris, J. (2006). *Contemporary Physicists and God’s Existence (part 2 of 3): A Series of Causes*. Available at: <http://www.islamreligion.com/articles/491/> [Accessed 2nd October 2016].
- 27 Idris, J. (2006). *Contemporary Physicists and God’s Existence (part 2 of 3): A Series of Causes*. Available at: <http://www.islamreligion.com/articles/491/> [Accessed 2nd October 2016].
- 28 Cited in Goodman, L. E. (1971). Ghazali’s Argument From Creation (I). *International Journal of Middle East Studies*, 2(1), 83.
- 29 Flew, A. (2007). *There is a God: How the World’s Most Notorious Atheist Changed His Mind*. New York: HarperOne. 2007, p. 165.
- 30 Narrated by Bukhari.
- 31 Cited in Al-Bayhaqi, A. (2006). *Kitab al-Asma was-Sifat*. Vol 2, p. 270.
- 32 The Qur’an, Chapter 112, Verses 2 and 3.
- 33 Lennox, J. C. (2009). *God’s Undertaker: Has Science Buried God?* Oxford: Lion Books, p. 183.
- 34 Hoover, J. (2004). Perpetual Creativity in the Perfection of God: Ibn Taymiyya’s Hadith Commentary on God’s Creation of this World. *Journal of Islamic Studies* 15(3), 296.
- 35 The Qur’an, Chapter 42, Verse 11.
- 36 The Qur’an, Chapter 58, Verse 7.
- 37 This is an estimate based on the number of hydrogen atoms that are contained in the estimated total number of stars in the observable universe. The number is higher if other atoms are included.
- 38 The Qur’an, Chapter 24, Verse 45.
- 39 Al-Tahawi. (2007). *The Creed of Imam Al-Tahawi. Translated from Arabic, Introduced and Annotated by Hamza Yusuf*. California: Zaytuna Institute, p. 50.
- 40 The Qur’an, Chapter 2, Verse 20.
- 41 Al-Qurtubi, M. (2006). *Al-Jaami’ al-Ahkaam al-Qur’an*. Edited by Dr. Adullah Al-Turki and Muhammad ‘Arqasusi. Beirut: Mu’assasa al-Risalah. Vol 1, pp. 338-9.
- 42 Inspired and adapted from Craig, W. L. *The coherence of Theism – part 2*. Available at: <http://www.bethinking.org/god/the-coherence-of-theism/part-2> [Accessed 13th November 2016].
- 43 Swinburne, R. (2004). *The Existence of God. 2nd Edition*. New York: Oxford University Press, pp. 52-72.
- 44 The Qur’an, Chapter 11, Verse 107.
- 45 Al-Ghazali, M. (2005). *Ihya’ ‘Ulum al-Deen*. Beirut: Dar Ibn Hazm, p. 107.



46 The Qur'an, Chapter 21, Verse 22.

47 Al-Mahalli, J. and As-Suyuti, J. (2007) Tafsir Al-Jalalayn. Translated by Aisha Bewley. London: Dar Al Taqwa, p. 690; Mahali, J. and As-Suyuti J. (2001) Tafsir al-Jalalayn. 3rd Edition. Cairo: Dar al-Hadith, p. 422. You can access a copy online at: <https://ia800205.us.archive.org/1/items/FP158160/158160.pdf> [Accessed 1st October 2016].

48 Avveroes. (2001) Faith and Reason in Islam. Translated with footnotes, index and bibliography by Ibrahim Y. Najjar. Oxford: One World, p. 40.

49 Narrated by Tirmidhi.

50 Rizvi, A. (2016). The Atheist Muslim. New York: St. Martin's Press, p. 127.

51 The answer to this objection has been inspired by and adapted from Craig, W.L. #148 *Causation and Spacetime*. Available at: <https://www.reasonablefaith.org/writings/question-answer/causation-and-spacetime/> [Accessed 27th September 2019].

52 Huemer, H and Kovitz, B. (2003). *Causation as Simultaneous and Continuous*, The Philosophical Quarterly, 53 (213), 556.

53 This is example is adapted from Immanuel Kant. See Kant, I. (1965) Critique of Pure Reason. Translated by N. Kemp Smith. New York: St Martin's Press, A203.

54 Wolchover, N. (2016). Quantum Gravity's Time Problem. Available at: <https://www.quantamagazine.org/quantum-gravitys-time-problem-20161201/> [Accessed 26th September 2019].

55 Adapted from Craig, W. and Sinclair, D. (2009). The Kalam Cosmological Argument. In: Craig, W. L. and Moreland, J. P. *The Blackwell Companion to Natural Theology*. West Sussex: Wiley-Blackwell, p. 196.

56 Wolchover, N. (2019). Physicists Debate Hawking's Idea That the Universe Had No Beginning. Available at: <https://www.quantamagazine.org/physicists-debate-hawkings-idea-that-the-universe-had-no-beginning-20190606/> [Accessed 26th September 2019].

57 Randhawa, S. (2011). *The Kalam Cosmological Argument and the Problem of Divine Creative Agency and Purpose*. Draft version. Available at: [http://www.academia.edu/29016615/The\\_Kalam\\_Cosmological\\_Argument\\_and\\_the\\_Problem\\_of\\_Divine\\_Creative\\_Agency\\_and\\_Purpose](http://www.academia.edu/29016615/The_Kalam_Cosmological_Argument_and_the_Problem_of_Divine_Creative_Agency_and_Purpose) [Accessed 22nd October 2016].